FranklinWH Generator Module Quick Installation Guide

April 20, 2026

Please visit *FranklinWH Support* for the latest FranklinWH documents.

Please read this document carefully to ensure the best reliability of the product and your warranty eligibility. For further information about warranty, please refer to the ***FranklinWH Limited Warranty***.

This document is intended for use by professional installation and maintenance service providers only and no statements, information or recommendations in this document constitute any express or implied warranty.

Please read this document carefully before installing or using the FranklinWH equipment. Failure to follow any instructions or warnings in this document may result in damage to the equipment, personal electric shock, severe injury, or even death.

Product Information

FranklinWH System is composed of aPower, aGate, other electrical components, and the FranklinWH App. This document applies only to the following products: aPower X, aGate X, the generator module, and the FranklinWH App.

FranklinWH Australia Pty Ltd. (FranklinWH) reserves the right to make any improvements to the product, and the contents in this document shall be subject to updates without further notification.

All images and pictures provided in this Manual are only for demonstration purposes and may differ in detail from the product, based on the product version.

Feedback

If you have any questions or comments, please send us an email at: *service-au@franklinwh.com*

Disposal of Scrapped Products

Scrapped products (including their internal chemicals and electrical materials) should not be disposed of with household wastes. Please refer to your local laws and regulations regarding disposal. These certification labels are for information only.

Table of Content

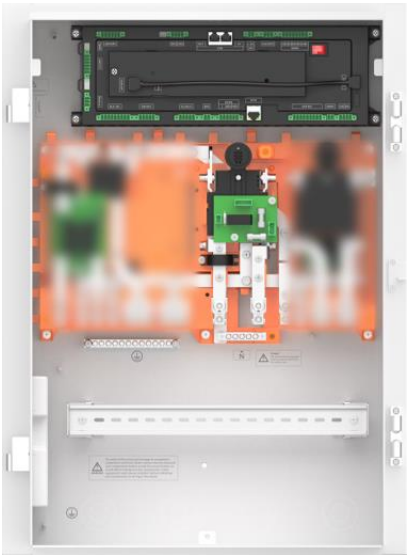
Generator Module Overview

Backup generators are a critical energy management source where power outages are becoming more common. To address the power instability concern, the Generator Module integrates generators into FranklinWH System. It is an optional aGate component.

Integrated Power Management
The generator can both power home loads and charge the aPower X battery

Easy Installation
The Generator Module is an optional aGate X component which can be easily installed without requiring any external components.

Wide Adaptability
Compatible with most models of standby generators. Applicable for new and retrofit installations.



DANGER

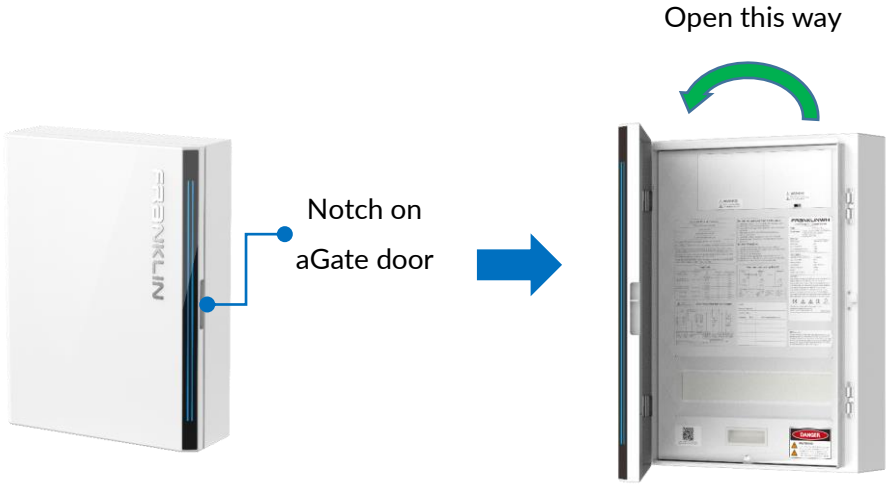
Despite being able to control the generator through the FranklinWH App, the remote **OFF** status does not mean the circuit has been physically disconnected. It is important to test the circuit status during the installation process.

Do not touch the output ports of the Generator Module directly or indirectly through conductive material, before disconnecting the circuit breakers.

Installation Steps

1) Remove the door and inner panel from the aGate

a) Grab the small notch on the right side of the aGate. Lift it and open the aGate door.



WARNING

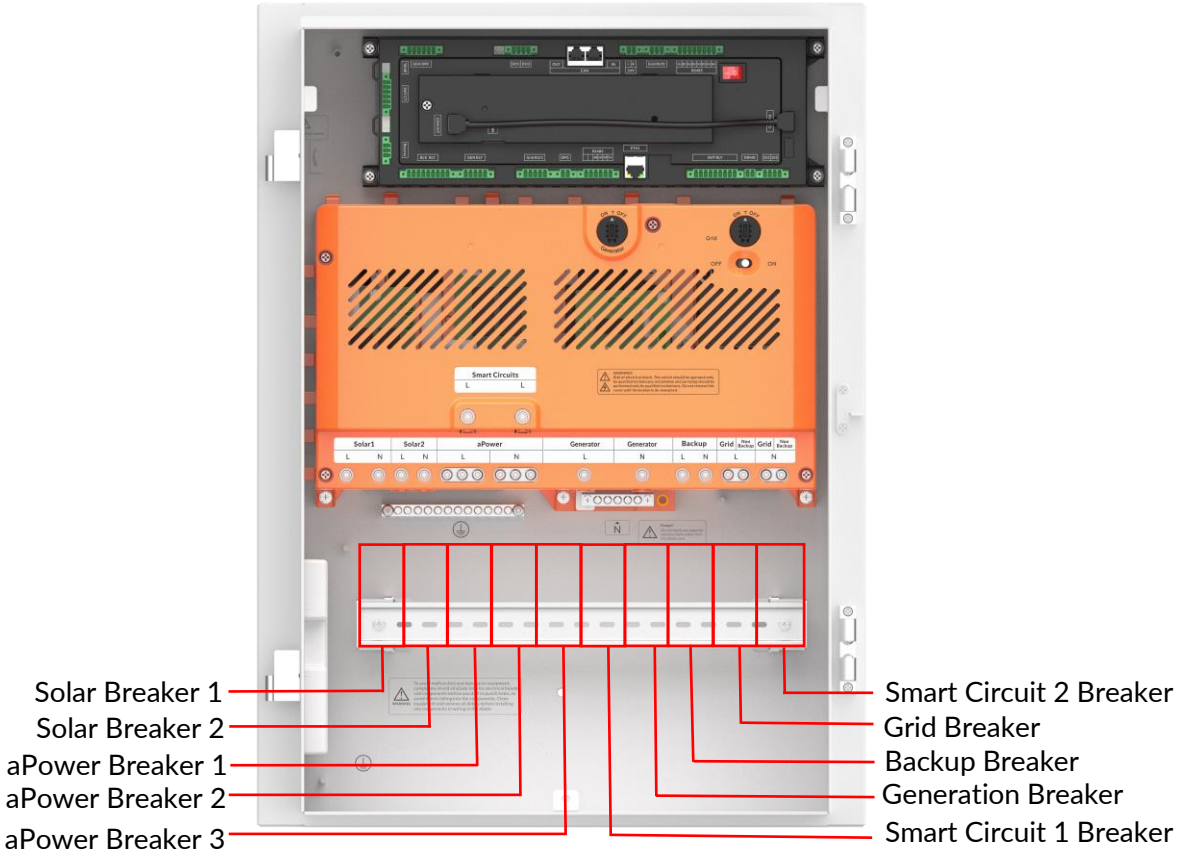
The door should not open wider than 100°.

b) Remove the door: Gently lift the door panel upward, remove the aGate door after the hinges are separated, and safely store it.

c) Remove the inner panel: Use a Phillips head screwdriver and to remove the inner panel screw. Remove the aGate inner panel and properly store it.

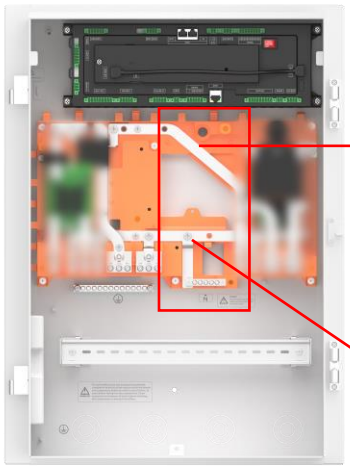
2) Install the Generator Module

a) Make sure all breakers in the aGate and all switches connected to the aGate are disconnected. Use a multimeter to check that the AC voltages at both input and output terminals of the aGate, as shown below, are zero (0).



b) Use a Phillips head screwdriver to loosen the four M5 captive screws on the protective cover, remove the cover and safely store it.

Follow the steps below to install the Generator Module.

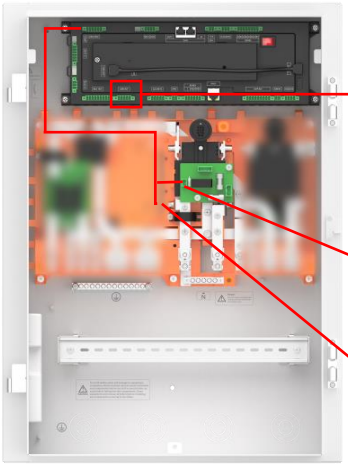


1

Place the Generator Module in the proper position and check that all installation holes are aligned. Tighten the two M6 combination screws at the positions marked to the recommended torque.

2

Remove the thermoplastic casing on the outside of the voltage sampling wire.



3

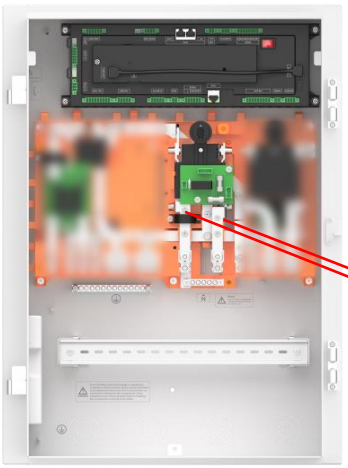
Connect the W007 cable to the Gen RLY connector on the EMS module. Tighten the screws on both ends of the terminal.

4

Connect the W008 cable R3-J3 plug to the J3 connector on the R3 board.

5

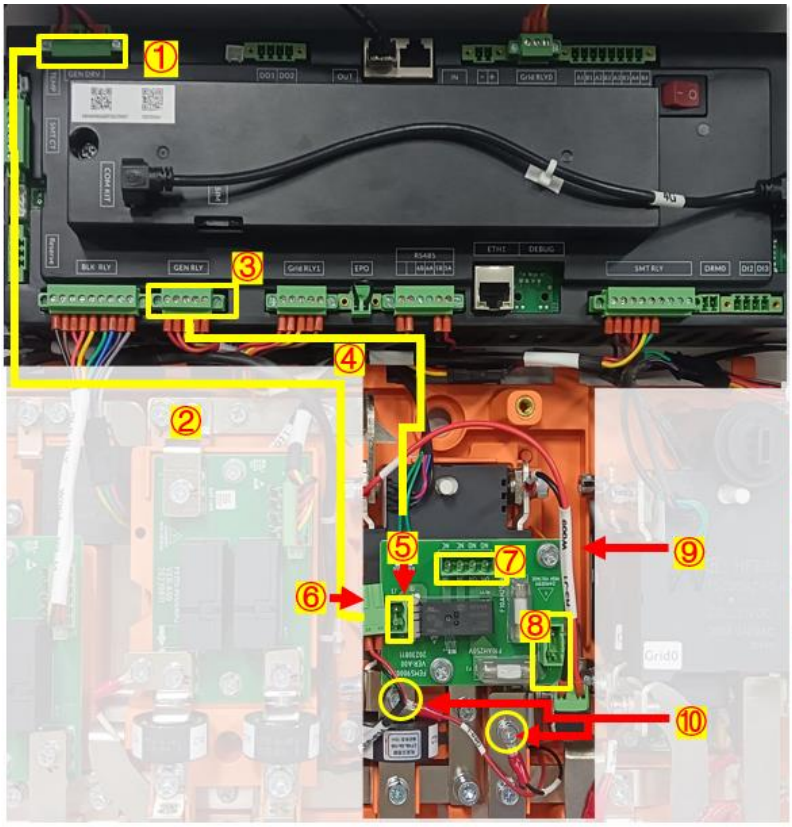
Connect the W008 cable Gen DRV plug to the Gen DRV connector on the EMS module. Tighten the screws on both ends of the terminal.



6

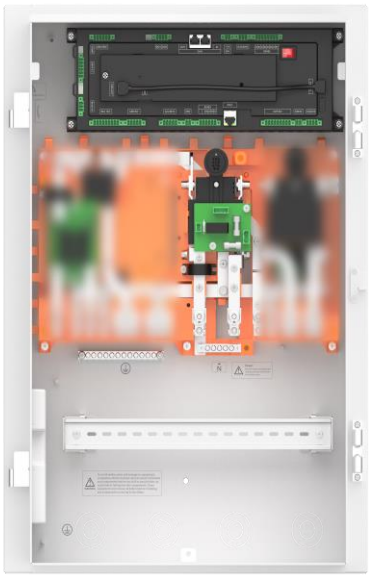
Connect the voltage sampling cables on the insulating support bracket and tighten the M4 x 10 screw with a Phillips screwdriver to a torque of 1.4 N·m.

The following image provides a close-up wiring reference.
Do not wire J1 port, J2 port and J3 port before knowing the generator startup type (voltage sensing, ATS or Dry Contact). Use a cable tie for the J1 & J3 cables.

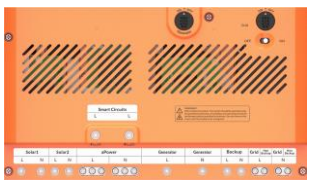


① GEN DRV Port (ON EMS)
② GEN DRV cable (On Module)
③ GEN RLY Port (On EMS)
④ GEN RLY Cable (On Module)
⑤ J3 Port Socket (On R3 Board)
⑥ J3 connector and cable (On Module)
⑦ J2 Port Socket (On R3 Board)
⑧ J1 Port Socket (On R3 Board)
⑨ J1 connector and cable(On Module)
⑩ Voltage sampling cable (On the Insulating Support Bracket)

If the generator is not ready to be connected, re-install the protective cover and fasten the four M5 captive screws using an electric screwdriver, and then tighten them to the recommended torque.



Re-install the protective cover



3) Connecting the Generator

There are three wiring plans, depending on the type of generator.

Type 1: Voltage Sensing

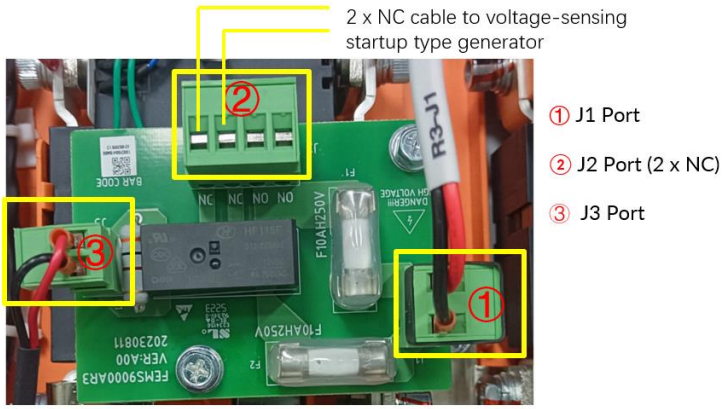
NOTE

Due to differences in various generator brands and types, the wiring diagram is for reference only. Refer to the specific generator instructions for actual wiring requirements.

a) Connect the generator power output wires (L, N, GND) to the generator input terminals on aGate (L, N & GND).

b) Follow these steps for connection:

b1. Plug R3-J1 cable to J1 port on the generator module board.
b2. Plug R3-J3 cable to J3 port on the generator module board.
b3. Remove the original voltage sensing port cable from the generator and strip the sensing cable around 4 mm then connect to the 2 NC pins of J2 port provided in the accessories package.



c) Used cables ranging from 1 mm² to 2.5 mm² according to local regulations or AS/NZS3000.

d) Make sure to connect the generator's starting battery charge terminal in the generator to the wire from a branch circuit of the Backup Panel.

NOTE

A secure connection must be kept between the battery charge terminal and the Backup Panel branch terminal, whether the generator is on or off.
Do not plug short terminals in the shipping attachment into any interface on the R3 board.

Type 2: ATS

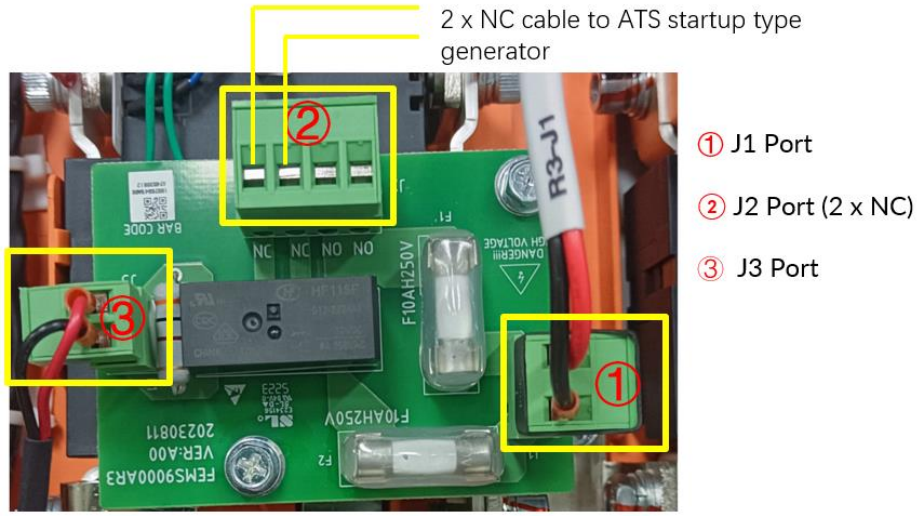
a) Remove the power grid input cable from the power grid port on the ATS.

b) Connect the grid input cables to the grid terminals (L, N & GND) in aGate.

c) Connect the output terminals of the generator system to the generator input terminals on the aGate.

d) Follow these steps for connection:

d1. Plug R3-J1 cable to J1 port on the generator module board.
d2. Plug R3-J3 cable to J3 port on the generator module board.
d3. Remove the original voltage sensing port cable from the generator and strip the cable around 4 mm then connect to the 2 NC pins of J2 port provided in the accessories package.



e) Used cables ranging from 1 mm² to 2.5 mm² according to local regulations or AS/NZS3000.

NOTE

Do not plug short terminals in the shipping attachment into any interface on the R3 board.

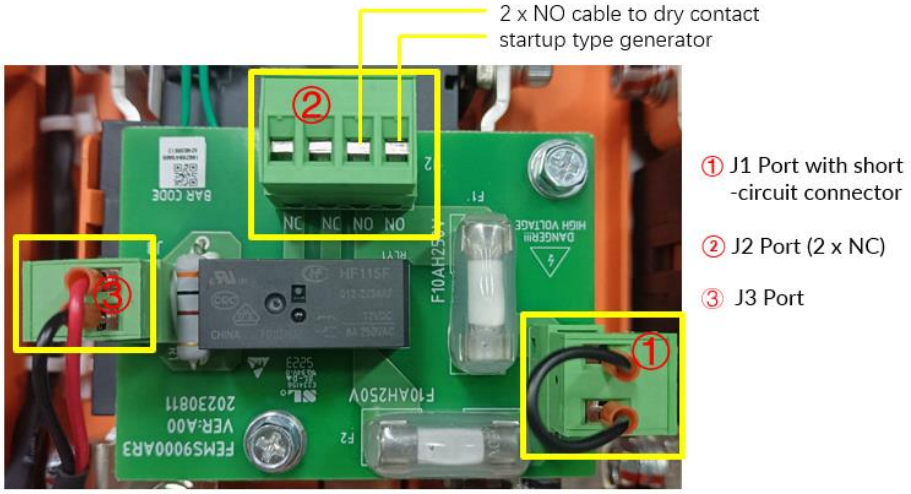
Type 3: Dry Contact

a) Connect the generator power output wires (L, N, GND) to the aGate generator input terminals (L, N, GND).

b) Follow these steps for connection:

b1. Plug the J1 Port by using the short-circuit J1 port from the accessories package. Plug the R3-J3 cable into the J3 port on the Generator Module.

b2. Remove the original startup cable from the generator and strip the cable around 4 mm then connect to the 2 NO pins of J2 port provided in the accessories package.



c) Used cables ranging from 1 mm² to 2.5 mm² according to local regulations or AS/NZS3000.

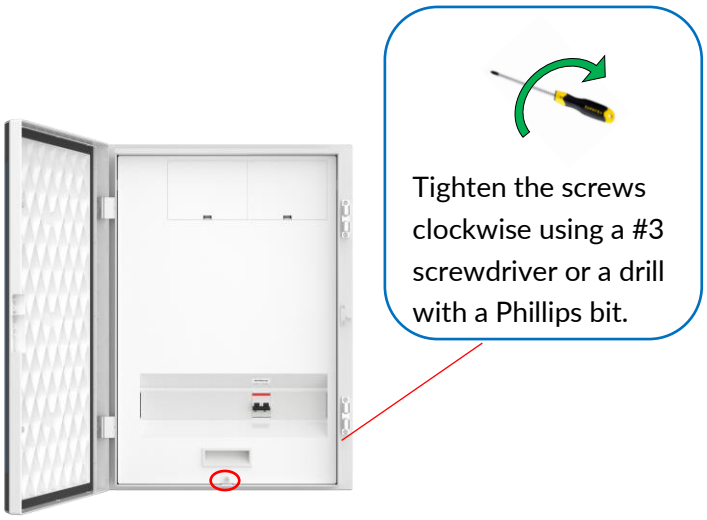
d) Connect the generator's starting Battery Charge terminal in the generator to the wire from a branch circuit of Backup Panel.

NOTE

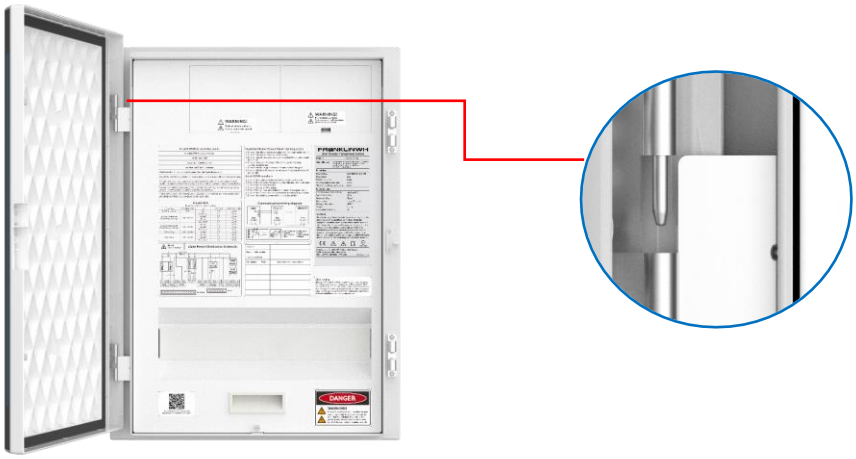
The connection must be kept between the Battery Charge terminal and the Backup Panel branch terminal, whether the generator is on or off.
Do not insert the R3-J1 terminal reserved for the aGate into any interface on the R3 board.

4) Completing Installation

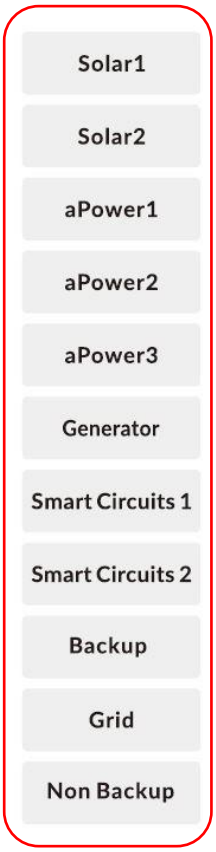
a) Install the inner panel and fasten it by tightening the 1 M5 x 12 combination bolts.



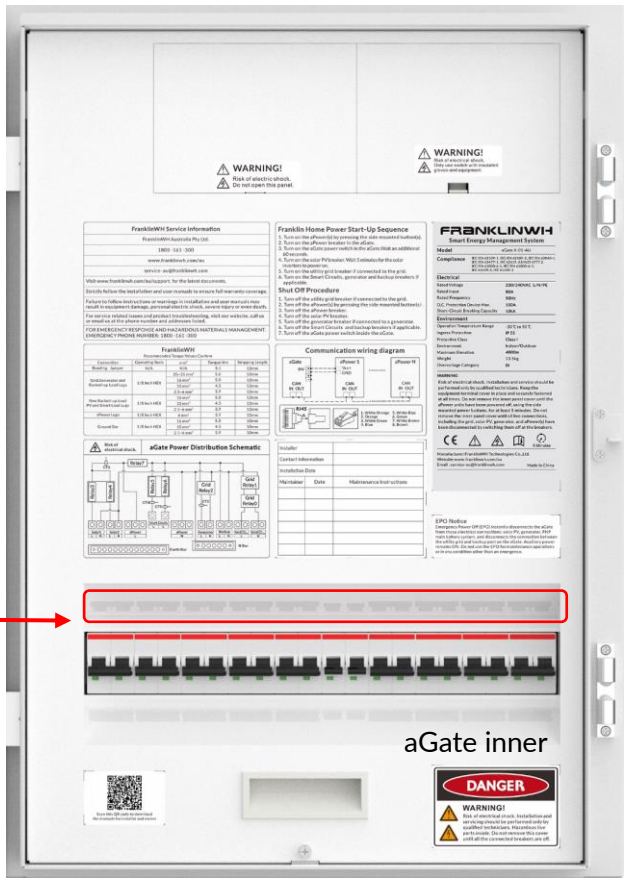
b) Mount the hinges on the aGate door to the aGate cabinet.



After the breakers are installed, place the labels from the literature kit (bag with labels and accessories) on the inner panel of aGate according to the position of the breaker, as shown in the diagram below.



Labels



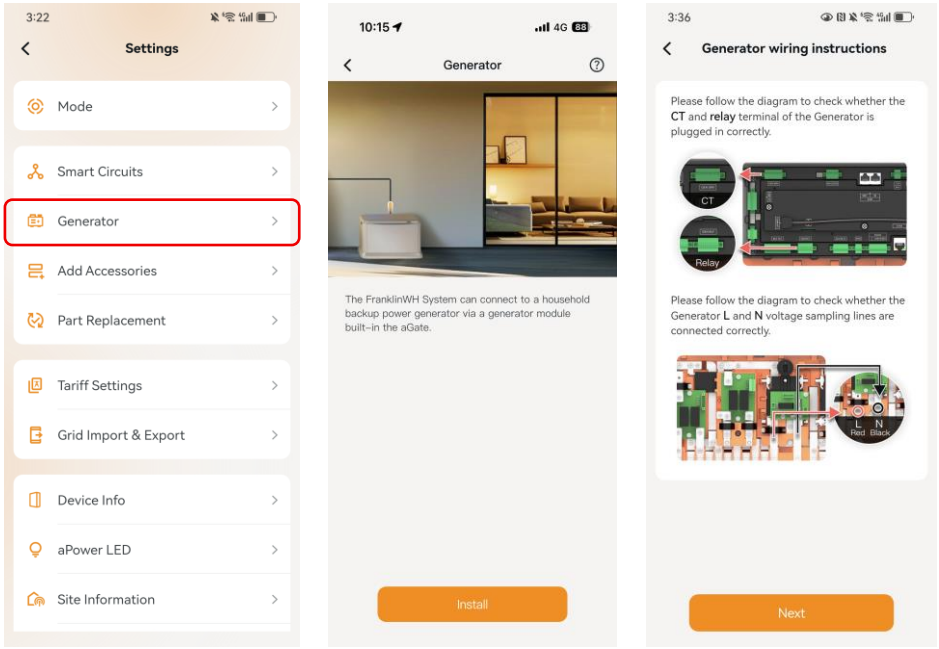
Label positions.

5) Commission the Generator using the FranklinWH App

Once system installation and wiring are complete, log in to the app with the installer account. From the home screen, navigate to **Settings** > **Generator**.

1. Read the Generator feature description and tap **Install**.

   Check the generator CT, Relay, and L/N voltage sampling line connections as per wiring instructions. Tap **Next**.



2. Select the desired generator type.

3. Set the generator parameters.

NOTE

The generator connection settings in **Start control type** should not be changed without physical authentication and must keep in agreement with the actual electrical connections and wiring of the FranklinWH System.

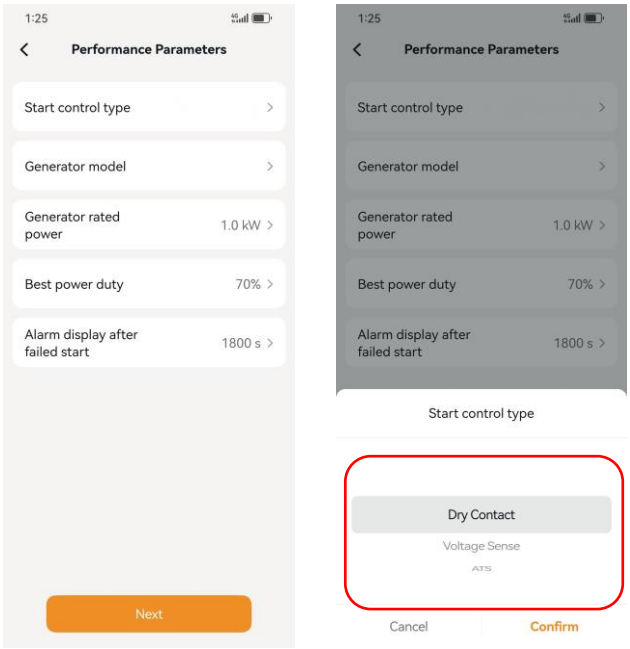
Start control type: Select the generator start type (Only available for Standby generator).

Generator model: Refer to the model number on the generator's nameplate.

Generator rated power: Refer to the value on the generator's name plate.

Best power duty: Set the best duty efficiency point of the generator (70% by default). Please refer to the generator manual or consult the generator supplier for the optimal setting.

Alarm delay after failed start: Set the delay period for the generator to be started. If generator startup fails, the system will push a message to the customer.



Tap **Next**.

4. Set the generator's operating mode.

   Standby generators support two operating modes: **Manual Mode** and **Auto Schedule**. Portable generator automatically detects and connects to the system.

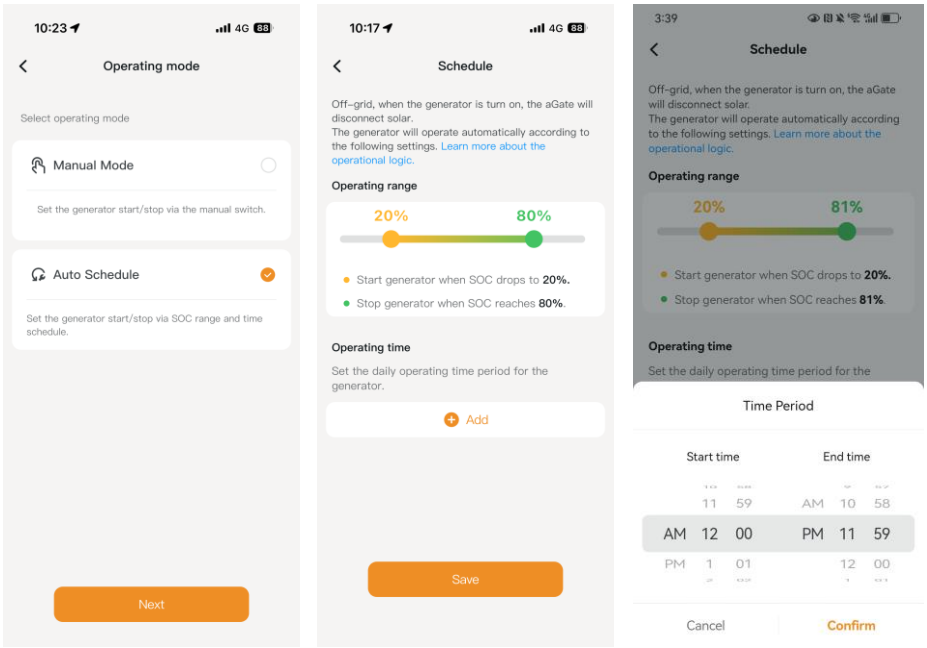
   Manual Mode: Default is manual. Customers may manually start or stop the generator.

   Auto Schedule: Check the **Auto Schedule** option. The generator will start only when both the battery SOC is below the lower limit and the set time period is active. The generator will stop immediately if the SOC reaches the set upper limit, or if the current time falls outside the set period.

   a) **Operating range**: adjust the slider to set the SOC upper and lower limits.

   b) **Operating time**: tap the plus icon (as shown) to set the operating time period. The system allows up to 3 non-overlapping periods (00:00-23:59 allowed for each) with an interval of at least 1 minute.

      If no time period is configured, the generator is allowed to operate without time restriction.

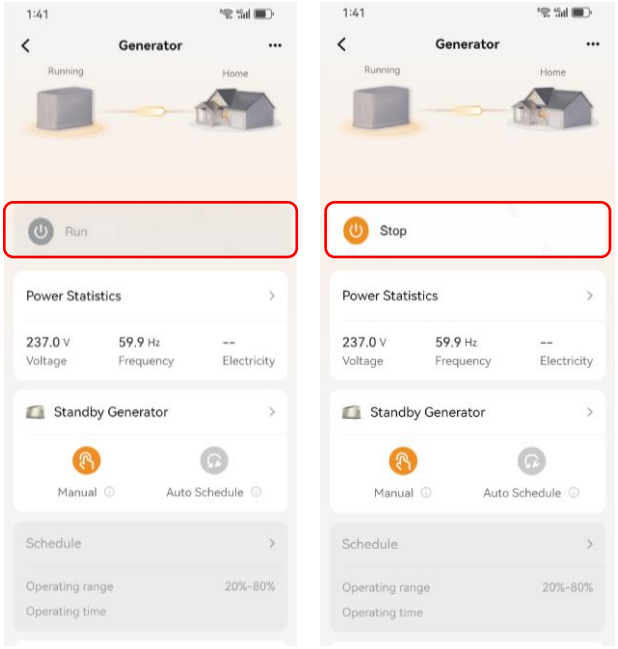


Tap **Save**.

5. Once all previous steps are complete, a pop-up will confirm that the installation was successful. And the generator's home screen appears.

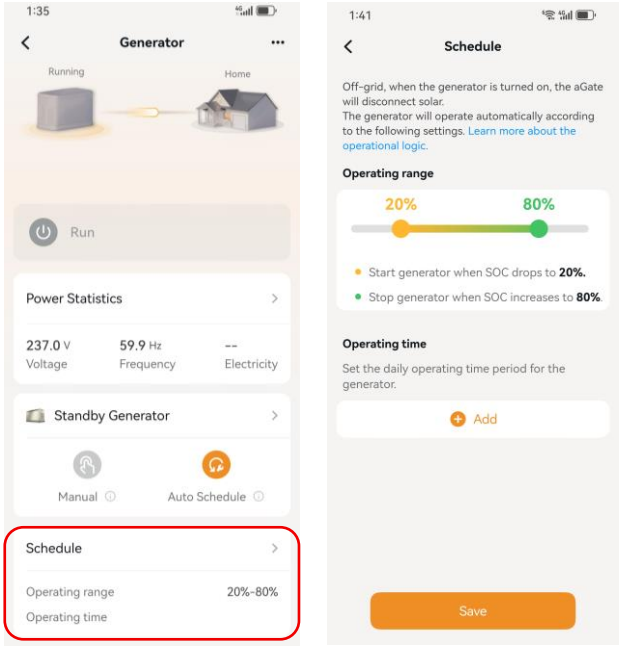
Standby Generator: Manual Mode

Tap **Run** or **Stop** to start or stop the generator manually.

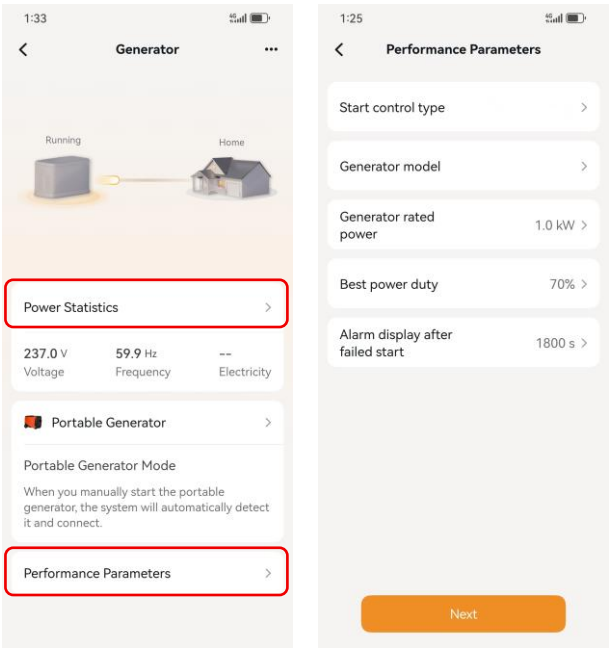


Standby Generator: Auto Schedule Mode

The generator runs on the preset schedule.



Portable Generator



Power Statistics: View the generator's power output statistics.

Performance Parameter: Set up the generator parameter.

Tap ··· on the upper-right corner to view the Guide, Generator wiring instructions, Generator operating logic, or to remove the generator.

For more information, refer to ***FranklinWH Commissioning Guide***.

Functional Verification Procedure

After completing generator commissioning, follow the steps below to verify the generator functions properly.

1. Start the system:

   a) Turn on the aGate power switch.

   b) Turn on the aPower breaker on the aGate.

   c) Turn on all other switches between the aGate and the aPower unit(s).

   d) Turn on the aPower switches on the side of each aPower.

NOTE

If there are multiple aPower batteries in an FranklinWH System, turn on aPower switches in sequence. Check whether the FranklinWH App reports any alarm for each activation.

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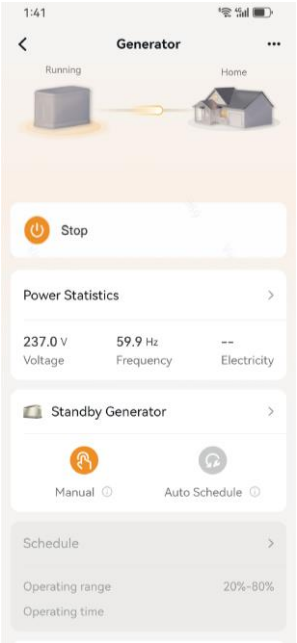
   e) Turn on the generator breaker (if any) inside the aGate.

   f) Turn on the generator switch.

   g) Log in to the FranklinWH App using the homeowner account, in off-grid mode, navigate to **Generator** screen and tap **Settings**. Note that the generator status must be **Standby** before performing this action.

   h) Manually turn on the generator, then wait until the voltage, frequency, and electricity readings are displayed.



2. Observe whether the parameter readings are as set in the previous section.

   If the generator failed to boot up after more than the preset startup delay period, go to the **Generator Settings** page in the app, and perform the following actions:

   a) Tap ··· on the upper right corner, then tap **Remove generator**.

   b) Go back to the **Settings** screen, tap **Generator**, and reconfigure the generator parameters as described in the previous section.

   c) Once the configuration is complete, manually turn on the generator and check whether the parameter readings on the **Power Statistics** page match the preset values.